

Amendments to the Claims: This listing of claims will replace all prior versions, and listings of claims in the application:

Listing of Claims:

Claims 1-17 (canceled)

1 Claim 18 (withdrawn): A method of preventing or treating a thrombotic disease
2 or condition in a mammal, the method comprising producing an ER resident chaperone protein
3 within a population of cells of said mammal, whereby the generation of active thrombin on the
4 surface of said population of cells is inhibited.

1 Claim 19 (withdrawn): The method of claim 18, wherein said population of cells
2 comprises endothelial cells.

1 Claim 20 (withdrawn): The method of claim 18, wherein said population of cells
2 comprises smooth muscle cells.

1 Claim 21 (withdrawn): The method of claim 18, wherein said population of cells
2 comprises macrophages.

1 Claim 22 (withdrawn): The method of claim 18, wherein said population of cells
2 comprises monocytes.

1 Claim 23 (withdrawn): The method of claim 18, wherein said ER resident
2 chaperone protein is GRP78/BiP.

1 Claim 24 (withdrawn): The method of claim 18, wherein said ER resident
2 chaperone protein is selected from the group consisting of GRP94, GRP72, Calreticulin,
3 Calnexin, Protein disulfide isomerase, cis/trans-Prolyl isomerase, and HSP47.

1 Claim 25 (withdrawn): The method of claim 18, wherein the production of said
2 ER resident chaperone protein within said population of cells results in a decrease in the level of
3 tissue factor procoagulant activity on the surface of said population of cells.

1 Claim 26 (withdrawn): The method of claim 18, wherein said population of cells
2 is present within an atherosclerotic plaque in said mammal.

1 Claim 27 (withdrawn): The method of claim 18, wherein said mammal has had a
2 myocardial infarction and is undergoing angioplasty or stenting.

1 Claim 28 (withdrawn): The method of claim 27, wherein said mammal is
2 undergoing stenting, and said population of cells is present on the surface of a stent within said
3 mammal.

1 Claim 29 (withdrawn): The method of claim 18, wherein said mammal is
2 undergoing cranial radiation.

1 Claim 30 (withdrawn): The method of claim 18, wherein said mammal is
2 undergoing vascular surgery.

1 Claim 31 (withdrawn): The method of claim 18, wherein a polynucleotide
2 encoding said ER resident chaperone protein, operably linked to a promoter, is introduced into
3 said population of cells, whereby said ER resident chaperone protein is produced.

1 Claim 32 (withdrawn): The method of claim 31, wherein said polynucleotide is
2 introduced into said cell using a viral vector.

1 Claim 33 (withdrawn): The method of claim 32, wherein said viral vector is an
2 adenoviral vector.

1 Claim 34 (withdrawn): The method of claim 31, wherein said polynucleotide is
2 introduced into said cell using a nonviral vector.

1 Claim 35 (withdrawn): The method of claim 34, wherein said nonviral vector is
2 introduced into said cell as naked DNA or using liposome-mediated transfection.

1 Claim 36 (withdrawn): The method of claim 18, wherein said ER resident
2 chaperone protein is produced by administering to said population of cells a compound that
3 induces the expression or activation of an endogenous ER resident chaperone protein.

1 Claim 37 (withdrawn): The method of claim 36, wherein said compound is a
2 cytokine.

1 Claim 38 (withdrawn): A method of identifying a compound that is useful in the
2 treatment or prevention of a thrombotic disease or condition, the method comprising:

3 (1) contacting a cell that expresses an ER resident chaperone protein, or that is
4 capable of expressing an ER resident chaperone protein, with said compound; and

5 (2) detecting the functional effect of said compound on said ER resident
6 chaperone protein;

7 wherein an increase in the expression or activity of said ER resident chaperone
8 protein in said cell indicates that said compound would be useful in the treatment or prevention
9 of said thrombotic disease or condition.

1 Claim 39 (withdrawn): The method of claim 38, wherein said ER resident
2 chaperone protein is GRP78/BiP.

1 Claim 40 (withdrawn): The method of claim 38, wherein said ER resident
2 chaperone protein is selected from the group consisting of GRP94, GRP72, Calreticulin,
3 Calnexin, Protein disulfide isomerase, cis/trans-Prolyl isomerase, and HSP47.

1 Claim 41 (withdrawn): The method of claim 38, wherein said cell is an
2 endothelial cell.

1 Claim 42 (withdrawn): The method of claim 38, wherein said cell is a smooth
2 muscle cell.

1 Claim 43 (withdrawn): The method of claim 38, wherein said cell is a
2 macrophage.

1 Claim 44 (withdrawn): The method of claim 38, wherein said cell is a monocyte.

1 Claim 45 (withdrawn): The method of claim 38, wherein said compound induces
2 said expression or activation of said ER resident chaperone protein in said cell without inducing
3 ER stress in said cell.

1 Claim 46 (withdrawn): A method of treating or preventing a thrombotic disease
2 in a mammal, the method comprising administering to said mammal a therapeutically or
3 prophylactically effective amount of a compound identified using the method of claim 38.

1 Claim 47 (currently amended) A method of inhibiting the generation of active
2 thrombin on the surface of a cell within an atherosclerotic plaque within a mammal, the method
3 comprising increasing the expression or activity of an ER resident calcium-binding protein in
4 said cell by introducing a polynucleotide operably linked to a promoter into said cell, wherein
5 said polynucleotide encodes said ER resident calcium-binding protein ~~producing an ER~~
6 ~~resident chaperone protein in said cell within an atherosclerotic plaque within said~~
7 ~~mammal.~~

1 Claim 48 (previously presented) The method of claim 47, wherein said cell is an
2 endothelial cell.

1 Claim 49 (previously presented): The method of claim 47, wherein said cell is a
2 smooth muscle cell.

1 Claim 50 (previously presented): The method of claim 47, wherein said cell is a
2 macrophage.

1 Claim 51 (previously presented): The method of claim 47, wherein said cell is a
2 monocyte.

1 Claim 52 (currently amended): The method of claim 47, wherein said ER
2 resident calcium-binding ~~chaperone~~ protein is GRP78/BiP.

1 Claim 53 (currently amended): The method of claim 47, wherein said ER
2 resident calcium-binding ~~chaperone~~ protein is selected from the group consisting of GRP94,
3 GRP72, Calreticulin, Calnexin, Reticulocalbin, Protein disulfide isomerase, cis/trans-Prolyl
4 isomerase, and HSP47.

1 Claim 54 (currently amended): The method of claim 47, wherein the increase in
2 the expression or activity ~~production~~ of said ER resident calcium-binding ~~chaperone~~ protein
3 within said cell results in a decrease in the level of tissue factor procoagulant activity on the
4 surface of said cell.

Claim 55 (canceled)

1 Claim 56 (currently amended): The method of claim ~~47~~ **55**, wherein said
2 polynucleotide is introduced into said cell using a viral vector.

1 Claim 57 (previously presented): The method of claim 56, wherein said viral
2 vector is an adenoviral vector.

1 Claim 58 (currently amended): The method of claim 47 ~~55~~, wherein said
2 polynucleotide is introduced into said cell using a nonviral vector.

1 Claim 59 (previously presented): The method of claim 58, wherein said nonviral
2 vector is introduced into said cell as naked DNA or using liposome-mediated transfection.

Claims 60-61 (canceled)

1 Claim 62 (currently amended): A method of inhibiting the generation of active
2 thrombin on the surface of a cell within a mammal, the method comprising increasing the
3 expression or activity of an ER resident calcium-binding protein in said cell by administering a
4 proinflammatory cytokine to said cell ~~producing an ER resident chaperone protein in said~~
5 ~~cell within said mammal by introducing into said cell a polynucleotide operably linked to a~~
6 ~~promoter, wherein said polynucleotide encodes said ER resident chaperone protein,~~
7 ~~whereby said ER resident chaperone protein is produced.~~

Claims 63-66 (canceled)

1 Claim 67 (new): The method of claim 62, wherein said proinflammatory
2 cytokine is interleukin-3.